

Stream Team Annual Report

2015

promoting citizen
awareness and involvement
in river and stream conservation



AJ Feicht (Team 211) and his Ag-Education classmates at Mizzou tackled a tough site on Hinkson Creek in Columbia. Nearly two tons of scrap metal and trash were removed by 20 volunteers.

A Summary of Stream Team Activities

After more than 25 years, our Stream Team volunteers never cease to amaze us. With over 4,200 active Stream Teams, the accomplishments made each year by such a passionate force are awe-inspiring. More than 133,900 hours were donated last year, valued at over \$3 million. We added 177 new Teams to the Program, which brings the total number of Teams to 5,307 and over 84,000 volunteers statewide. It is the dedication and determination of these Teams that truly drives the Program. Here are some of the past year's accomplishments:

- ◆ **625 tons of trash** were removed from Missouri's rivers and streams.
- ◆ **1,293 water quality monitoring trips** were completed.
- ◆ **21,318 trees** were planted.
- ◆ **1,268 storm drains** were stenciled or marked.
- ◆ **60 habitat improvement projects** were completed.
- ◆ Over **\$3 million** worth of volunteer labor was dedicated to our streams.
- ◆ The **Stream Team Academy** hosted workshops on Scientific Drawing, EPT (Ephemeroptera, Plecoptera, Trichoptera), and Reptiles & Amphibians.
- ◆ Three new **Stream Team Associations** were formed.

As a Program we are continuously striving to keep up with the growing demands of our outstanding volunteers. In 2015 we were able to release the newest upgrades to the Interactive Map that not only allow volunteers to see where activities are occurring but also offers greater mapping capabilities for locating and marking activity sites. 2015 also brought recognition to the Program when staff were presented with the Excellence in Conservation Award by the Midwest Association of Fish and Wildlife Agencies, which includes 13 states and three Canadian provinces. It is truly the work of our volunteers that deserve the recognition and without them the Program would not be what it is today.



The Valley Park Middle School Stream Team 3271 reported less and less trash every time they went out to Fishpot Creek last fall. That's a good thing!



Stream Team is sponsored by:

Missouri Department of Conservation
Missouri Department of Natural Resources
Conservation Federation of Missouri

Dedication & Enthusiasm

Water Quality Monitoring

The Volunteer Water Quality Monitoring (VWQM) portion of the Program saw another productive year in 2015. This portion of the Stream Team Program provides volunteers the opportunity to monitor their adopted stream and collect crucial baseline data. There were 31 VWQM workshops held across the state in 2015, training 428 citizens to collect and submit important scientific information on their adopted stream.

| Water Quality Monitoring Workshops | Number of Workshops | Number of Volunteers Trained |
|------------------------------------|---------------------|------------------------------|
| Introductory | 11 | 249 |
| Level 1 | 6 | 68 |
| Level 2 | 5 | 43 |
| Level 3 | 2 | 2 |
| VWQM Validation | 4 | 21 |
| Scientific Drawings | 1 | 14 |
| EPT | 2 | 31 |
| Total | 31 | 428 |

There were 4,405 citizen scientists that reported 1,293 monitoring trips collecting biological, chemical, and physical data in 2015. Our tiered VWQM training structure allows increased flexibility of citizen involvement while expanding education and use of data collected at each level of training. The workshops are structured, like most of the Stream Team Program, to allow different levels of participation so volunteers can determine how much time and effort they wish to put forth.

Trained monitors also attended Stream Team Academy VWQM-related trainings. The Scientific Drawing workshop trained 14 monitors to better

identify benthic macroinvertebrates by drawing them in a magnified view. Another 31 monitors took their bug ID to higher level by learning to identify mayflies, stoneflies, and caddisflies to the Family level at two EPT (Ephemeroptera, Plecoptera, and Trichoptera) trainings.

Volunteers and other cooperators collected and analyzed data for three Cooperative Stream Investigation (CSI) projects and one Advanced Monitoring Project (AMP). A total of 12 workshops were held to train 15 volunteers to collect specialized sample data. During the Fenton Creek CSI Project, samples were collected for chloride, sulfate, hardness, and *E. coli* samples in support of TMDL (Total Maximum Daily Load) development. During the Williams Creek CSI Project, *E. coli* samples and stream discharge measurements were collected also in support of TMDL development. During the Dry Branch CSI Project, samples were collected for chloride, total nitrogen, total phosphorus, and total suspended solids as well as stream discharge measurements in support of water quality model development. The Meramec River Basin Advanced Monitoring Project for Nutrients is a large-scale effort by 12 volunteers. They collect and compare nitrate, turbidity, and orthophosphate data at 25 locations throughout the Meramec, Big, and Bourbeuse River watersheds.

Volunteers monitoring their own adopted streams provide a real contribution by gathering information and data that would otherwise go uncollected.



H2O Girls, Team 5063, pause to take a peek at the macroinvertebrates in Kiefer Creek. Three separate Troops removed 400 pounds of litter, 600 pounds of heavy metal and other large items. Amazing work!

Stream Team Awards

The Stream Team Program annually recognizes deserving volunteers from each of the three regions of the state and a statewide Water Quality Monitoring volunteer with the Stream Team Ambassador Award. The Ambassador Award recognizes volunteer accomplishments in the Program's three primary goals of education, stewardship, and advocacy. Last year there was also an award given for outstanding work on a CSI Special Water Quality Monitoring Project. The 2015 recipients were:

Stream Team Ambassador Awards

- ◆ **Bernie Arnold**
Stream Team 211-The Mighty City of Arnold
- ◆ **Janice Imler and Mary Duncan**
Stream Team 4752-Save Blue Springs Creek
- ◆ **Ronna Haxby**
Stream Team 4325-Ozarks Water Watchers

CSI Ambassador Award

- ◆ **Bob Korpella**
Stream Team 4505-Nature Wanders

VWQM Ambassador Award

- ◆ **Larry Ruff**
Stream Team 463-Greenway Network, Inc.

2015 Fast Facts

During 2015, Stream Teams . . .

- ◆ collected **625** tons of trash
- ◆ planted **21,318** trees
- ◆ stenciled **1,268** storm drains
- ◆ conducted **1,293** water monitoring trips
- ◆ gave **45** presentations to other groups
- ◆ completed **175** educational events
- ◆ reported **133,908** total volunteer hours



Team 5080 helped out at the annual Dardenne Creek Monitoring Day, hosted by Greenway Network (Team 463). Water quality data was collected at a total of 15 different sites!

Respect

| Activity | Participants | Hours | Units | Value* |
|--|---------------|----------------|-------------------|-----------------------|
| Adopt-An-Access | 10 | 10 | 10 agreements | \$235.60 |
| Advocacy | 49 | 168 | 18 events | \$3,958.08 |
| Articles Written (newspaper, newsletter, etc.) | 19 | 97 | 69 articles | \$2,285.32 |
| Association Activities | 65 | 353 | 25 events | \$8,316.68 |
| Award Winners | 22 | 47 | 9 awards | \$1,107.32 |
| Display at Fairs, etc. | 84 | 651 | 14 events | \$15,337.56 |
| Educational Projects | 5,197 | 21,320 | 175 events | \$502,299.20 |
| Forestkeepers (Forest Monitoring) | 17 | 68 | 9 trips | \$1,602.08 |
| GPS | 21 | 23 | 13 | \$541.88 |
| Grant Projects | 13 | 73 | 11 projects | \$1,719.88 |
| Habitat Improvement | 628 | 1,963 | 60 projects | \$46,248.28 |
| Letters (written in support of ST issue) | 5 | 8 | 5 letters | \$188.48 |
| Litter Pickups | 18,415 | 83,965 | 625 tons of trash | \$1,978,215.40 |
| Media Contacts | 30 | 46 | 33 interviews | \$1,083.76 |
| Meetings (held or attended) | 1,065 | 2,184 | 1,084 attendees | \$51,455.04 |
| Mentoring | 14 | 36 | 7 projects | \$848.16 |
| Monofilament Recycling Project | 5 | 5 | 22 ounces | \$117.80 |
| Other Miscellaneous Projects** | 647 | 4,354 | 103 projects | \$102,580.24 |
| Planted Trees | 533 | 2,691 | 21,318 trees | \$63,399.96 |
| Pre-activity Planning | 330 | 753 | 183 projects | \$17,740.68 |
| Photo Point Monitoring | 63 | 55 | 156 photos | \$1,295.80 |
| Presentations to Other Groups | 395 | 2,018 | 45 presentations | \$47,544.08 |
| Rain Garden/Barrel or Green Roof | 109 | 407 | 15 projects | \$9,588.92 |
| Recruitment (new members) | 104 | 122 | 122 people | \$2,874.32 |
| River Observation (possible pollution event) | 6 | 26 | 2 projects | \$612.56 |
| Stream Access Maintenance | 36 | 73 | 11 projects | \$1,719.88 |
| Storm Drain Stenciling | 30 | 289 | 1,268 drains | \$6,808.84 |
| Streambank Stabilization Projects | 20 | 170 | 3 projects | \$4,005.20 |
| Workshops (attended or conducted) | 482 | 4,066 | 489 attendees | \$95,794.96 |
| Water Quality Monitoring | 4,405 | 7,860 | 1,293 trips | \$185,181.68 |
| Zebra Mussel Monitoring | 10 | 8 | 5 trips | \$188.48 |
| Totals | 32,829 | 133,909 | | \$3,154,896.04 |

*\$23.56/hour is the current national wage rate for the estimated value of volunteer time (U.S. Dept. of Labor).

**Includes projects like website development, newsletters, scout programs, fundraising, etc.



Vanessa Frazier of Team 1617 received the Governor's Natural Resources Champion Award for her dedication and commitment to improving the community of Howardville in the Missouri Bootheel.

Stash Your Trash

The Stash Your Trash Program targets trash on Missouri streams by providing litter bags to Missouri's float outfitters. In 2015, 138 float outfitters throughout the state participated in the Stash Your Trash Program, 95 of which offered discounts to Stream Team volunteers in the Stream Team Float Outfitters Discount Directory. Over 353,000 red mesh bags were provided to livery business owners to distribute to the public, preventing countless tons of trash from entering Missouri's recreational waterways. Over 30,000 red and green mesh bags and 1,900 blue poly bags were provided to Stream Teams in their cleanup efforts. Since 1998, over 5,731,000 bags have been provided to outfitters!

Over
\$3
million!

26-year Fast Facts

Since 1989, Stream Teams have . . .

- ◆ collected **11,321** tons of trash
- ◆ planted **319,144** trees
- ◆ stenciled **18,168** storm drains
- ◆ conducted **28,282** water monitoring trips
- ◆ given **3,065** presentations to other groups
- ◆ completed **4,813** educational events
- ◆ reported **2,593,793** total volunteer hours



Team 4025 held their annual Lower Current River cleanup. They picked up 52 bags of trash and seven tires over a 25-mile stretch.

Accomplishment

What's To Come . . .

Our volunteers continue to march onward towards their clean water goals. New Teams continue to form at a rapid pace while old Teams become renewed. Record-setting winter flooding throughout the state motivates Teams to go above and beyond in affected areas. New and unique special water quality projects are emerging. Former staff members are moving on to bigger and better endeavors while new staff members give promise to the future of the Program. Watch for exciting news from Stream Teams United (formerly known as Missouri Stream Team Watershed Coalition) as they continue to establish their presence among resource

advocates and expand the voice of Stream Teams.

We will say goodbye to the long standing face of Stream Team as Stream Team Coordinator Mark Van Patten retires. His presence, expertise, and influence on the Program will be greatly missed by both staff and volunteers.

Without the passion and dedication of our citizen volunteers who care about the waters in which they float, recreate, and get drinking water from, what would our waterways look like today? Stream Teams are what contribute to the cleanest, most beautiful, and most visited hidden gems in the Midwest!

2016 Stream Team Staff



Back row from left: Randy Sarver (DNR), Molly Runyon (DNR), Mark Van Patten (MDC) and Kat Lackman (MDC).
Front row from left: Trish Rielly (DNR), April Williams (MDC), Amy Meier (MDC) and Karen Westin (DNR).
Not shown: Holly Neill (MSTWC) Sherry Fischer and Chris Riggert (MDC).



Mark Van Patten from Steam Team 1 (Roubidoux Fly Fishers Association) enjoying a long-time passion of his. Thank you for your dedication!



Plattin Creek is now free of 55 tires, 250 pound of scrap metal, and a picnic table, thanks to the hard work of Team 4840.



The City of Jefferson Team 4529 held another successful Serve Jeff City event, drawing in over 300 volunteers that picked up a ton of litter and planted 300 river oat plants along Wears Creek.

Questions? Please contact us at:

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